# CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

**NABL** - Accredited Laboratory as per ISO / IEC-17025 :2005

T-2377


Job No.: CTCE/BBMP/KRIDL/W.No.13/CSR-12/227e/Cube/2016-17 22.02.2017

## TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

| | | |
|---|---|---|
| * Customer | : | **Asst. Executive Engineer,** Project Sub Division, BBMP, Bangalore. |
| * Agency | : | **Technical Manager,** KRIDL, Bangalore. |
| * Name of the work | : | Development of Dobighat in Ward No.13, BBMP, Bangalore. |
| * Reference | : | AEE/PSD/PR/120/2016-17 Dated: 23.12.2016 |
| * Sample ID | : | Culvert Covering Slab Concrete |
| Technical Reference | : | IS: 516-1959 (RA-2013) |
| Size of cubes | : | 150mmx150mmx150mm |
| Cross Sectional Area | : | 22500 $mm^2$ |
| * Grade of Concrete | : | $M_{20}$ |
| Compressive Strength as on | : | $28^{th}$ day |
| Sample Received on | : | 22.02.2017 |

| Sl.No. | Date of casting | Date of testing | Weight of cube (Kg) | Failure load (KN) | Compressive strength ($N/mm^2$) |
|---|---|---|---|---|---|
| 1 | 25.01.2017 | 22.02.2017 | 8.139 | 485.9 | 21.60 |
| 2 | 25.01.2017 | 22.02.2017 | 8.215 | 517.8 | 23.01 |
| 3 | 25.01.2017 | 22.02.2017 | 8.328 | 512.6 | 22.78 |

*Information is furnished by the Customer/Representative.

Civil-Tech Consultants & Engineers Bangalore

Note:

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⇒The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒Any Query regarding the report must be reported within 30 days from the date of testing.

*********

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Technical Manager

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| * Grade of Concrete | : | $M_{20}$ |
| Compressive Strength as on | : | $28^{th}$ day |
| Sample Received on | : | 24.02.2017 |

Asst. Executive Engineer
Project Sub Division-I
Dasarahalli Zone,
Bruhat Bengaluru Mahanagara Palike

| Sl.No. | Date of casting | Date of testing | Weight of cube (Kg) | Failure load (KN) | Compressive strength ($N/mm^2$) |
|---|---|---|---|---|---|
| 1 | 27.01.2017 | 24.02.2017 | 8.188 | 480.3 | 21.35 |
| 2 | 27.01.2017 | 24.02.2017 | 8.275 | 526.8 | 23.41 |
| 3 | 27.01.2017 | 24.02.2017 | 8.338 | 503.1 | 22.36 |

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| Compressive Strength as on | : | $28^{th}$ day |
| Sample Received on | : | 24.02.2017 |

| Sl.No. | Date of casting | Date of testing | Weight of cube (Kg) | Failure load (KN) | Compressive strength ($N/mm^2$) |
|---|---|---|---|---|---|
| 1 | 27.01.2017 | 24.02.2017 | 8.139 | 524.3 | 23.30 |
| 2 | 27.01.2017 | 24.02.2017 | 8.298 | 536.6 | 23.85 |
| 3 | 27.01.2017 | 24.02.2017 | 8.305 | 543.6 | 24.16 |

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Job No.: CTCE/BBMP/KRIDL/W.No.13/CSR-12/227e/Pre Slab/2016-17 30.01.2017

## TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CORE

| | | |
|---|---|---|
| * Customer | : | **Asst. Executive Engineer,** Project Sub Division, BBMP, Bangalore. |
| * Agency | : | **Technical Manager,** KRIDL, Bangalore. |
| * Name of work | : | Development of Dobighat in Ward No.13, BBMP, Bangalore. |
| * Reference | : | AEE/PSD/PR/120/2016-17 Dated: 23.12.2016 |
| * Sample ID | : | Precast Slab (250mm Thick) |
| * Grade of Concrete | : | $M_{20}$ |
| Techinical Reference | : | IS:516-1959 (RA- 2013), SP-24:1983. |
| Sample Received on | : | 25.01.2017 |
| Date of Testing | : | 30.01.2017 |

| Sl. No | Dia of Core D (mm) | Height of Core H (mm) | Core Wt (Kg) | Density of Core (kg / $m^3$) | H / D | Correction factor (Based on H/D) | Failure Load (kN) | Core Strength ( $N/mm^2$) | Correction Factor for the Dia. (Strength of the Core x 1.08) | Corrected Cylinder Compressive Strength ($N/mm^2$) | Equivalent Cube Compressive Strength ($N/mm^2$) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 50.00 | 80.00 | 0.399 | 2540.11 | 1.60 | 0.957 | 32.15 | 16.37 | 17.68 | 18.48 | 23.10 |
| 2 | 50.00 | 81.00 | 0.403 | 2533.90 | 1.62 | 0.959 | 33.60 | 17.11 | 18.48 | 17.72 | 22.15 |
| 3 | 50.00 | 82.00 | 0.410 | 2546.48 | 1.64 | 0.961 | 35.60 | 18.13 | 19.58 | 18.82 | 23.53 |

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